Service Bulletin

MOTORCYCLE	
DATE	: Mar. 15, 2013
PAGE	: 1 OF 1

SUBJECT	:	YEARLY CHANGE MODEL INFORMATION		
APPLICABLE MODEL	:	DL650A/UEL3		
EFFECTIVE ENGINE OR FRAME NO.	:	DL650AL3	E21	JS1C7111100109726 –
			E24	JS1C7111200100962 –
			E28 and 33	JS1VP56A D2100001 –
			E38	JS1VP56A D2100001 –
			E99	JS1C71213D0100001 –
		DL650AUEL3	E21	JS1C7211100100090 –
REFERENCE	:	E21, 24, 28, 33, 38 and 99		

This bulletin is to inform you of the service information for the above models.
When you service above models, please refer to the following service manuals. Please note, however, that the contents indicated below in such manuals should be replaced by those in the attached sheet.

AFFECTED SERVICE MANUAL

MANUAL NAME	MANUAL NUMBER	CORRESPONDING PAGE
DL650A SERVICE MANUAL (BOOK):	99500-36220-01E	Page 0A-7, 0A-8, 0C-5, 1A-5, 1A-6, 1A-22, 1H-4, 9A-1, 9A-7, 9A-8, 9C-9, 9D-8
DL650A SERVICE MANUAL (CD-ROM):	99560-36220-018	

We believe that this information will be useful in your service activities.

CONTENTS

Country and Area codes ..... ATTACHED SHEET: PAGE 1
Warning, Caution and Information Labels Location ..... ATTACHED SHEET: PAGE 1
Service Data ..... ATTACHED SHEET: PAGE 2
FI System Wiring Diagram ..... ATTACHED SHEET: PAGE 2
Terminal Alignment of ECM Coupler ..... ATTACHED SHEET: PAGE 3
DTC Table ..... ATTACHED SHEET: PAGE 4
Fuel Tank Drain Hose and Breather Hose Routing Diagram ..... ATTACHED SHEET: PAGE 5
No Spark or Poor Spark ..... ATTACHED SHEET: PAGE 6
Wiring Diagram ..... ATTACHED SHEET: PAGE 7
Wiring Harness Routing Diagram ..... ATTACHED SHEET: PAGE 8
Ignition Switch Inspection ..... ATTACHED SHEET: PAGE 10
Fuel Tank Side Cover and Fuel Tank Front Cover ..... ATTACHED SHEET: PAGE 10

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Section 0A

Country and Area Codes

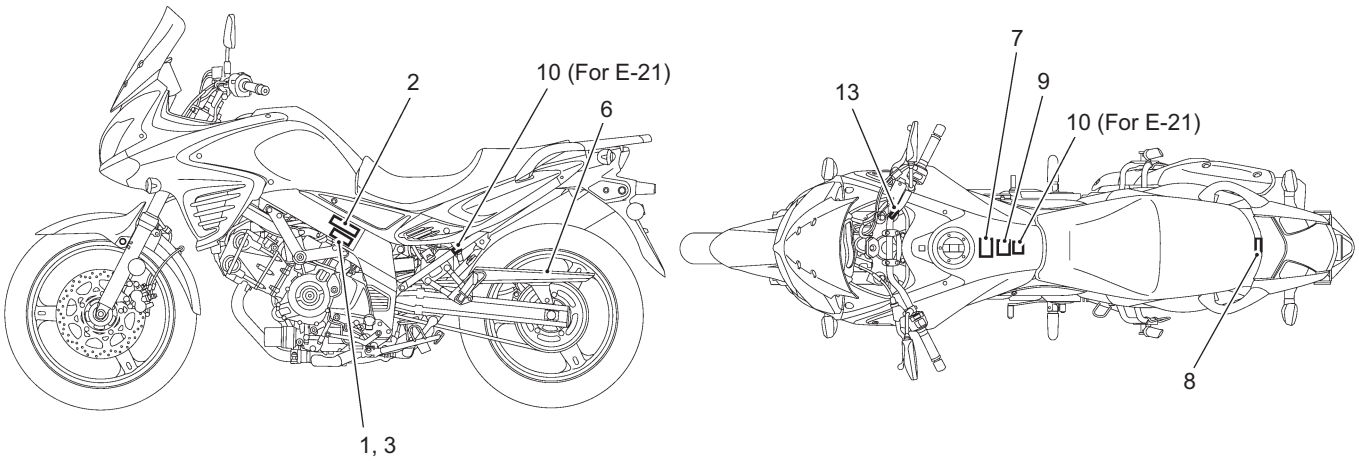
ADDED

The following codes stand for the applicable country(-ies) and area(-s).

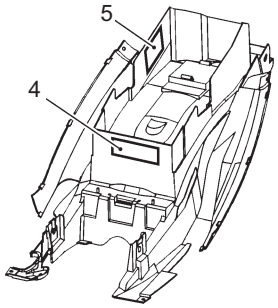
Code	Country or Area	Effective Frame No.
DL650A L3 (E-21)	E.U.	JS1C7111100100726 –
DL650AUE L3 (E-21)	E.U.	JS1C7211100100090 –
DL650A L3 (E-24)	Australia	JS1C7111200100962 –
DL650A L3 (E-28)	Canada	JS1VP56A D2100001 –
DL650A L3 (E-33)	California (U.S.A)	JS1VP56A D2100001 –
DL650A L3 (E-38)	Taiwan	E38 JS1VP56A D2100001 –
DL650A L3 (E-99)	Except the above Country or area	E99 JS1C71213 D0100001 –

Warning, Caution and Information Labels Location

UPDATED



[A]



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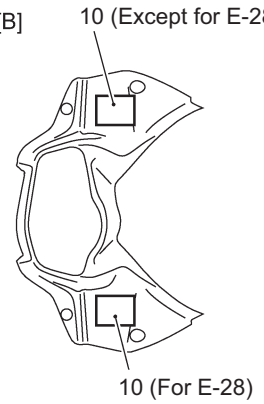

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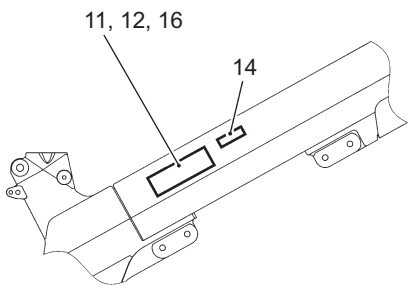

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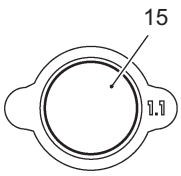


1. Noise label (For E-03, 24, 33)	11. I.D. label (For E-21, 24)
2. Information label (For E-03, 28, 33, 99 (If equipped))	12. Safety plate (For E-03, 28, 33, 99 (if equipped))
3. ICES Canada label (For E-28)	13. Brake fluid information mark (For E-21)
4. Vacuum hose routing label (For E-33)	14. Brake approval mark (For E-21)
5. Manual notice label (For E-03, 33)	15. Radiator cap label (For E-21)
6. Tire information label (For E-03, 21, 24, 28, 33, 38, 99 (If equipped))	16. Manufacture label (For E-38, 99 (If equipped))
7. General warning label (For E-03, 21, 24, 28, 33, 38, 99 (If equipped))	[A]: Rear front fender
8. Rear carrier warning label (For E-03, 21, 24, 28, 33, 38, 99 (If equipped))	[B]: Meter panel
9. Steering warning label (For E-03, 21, 24, 28, 33, 38, 99 (If equipped))	[C]: Frame (RH)
10. Screen label (For E-03, 21, 24, 28, 33, 38, 99 (If equipped))	[D]: Radiator cap

Section 0C

Service Data

Wattage

Unit: W

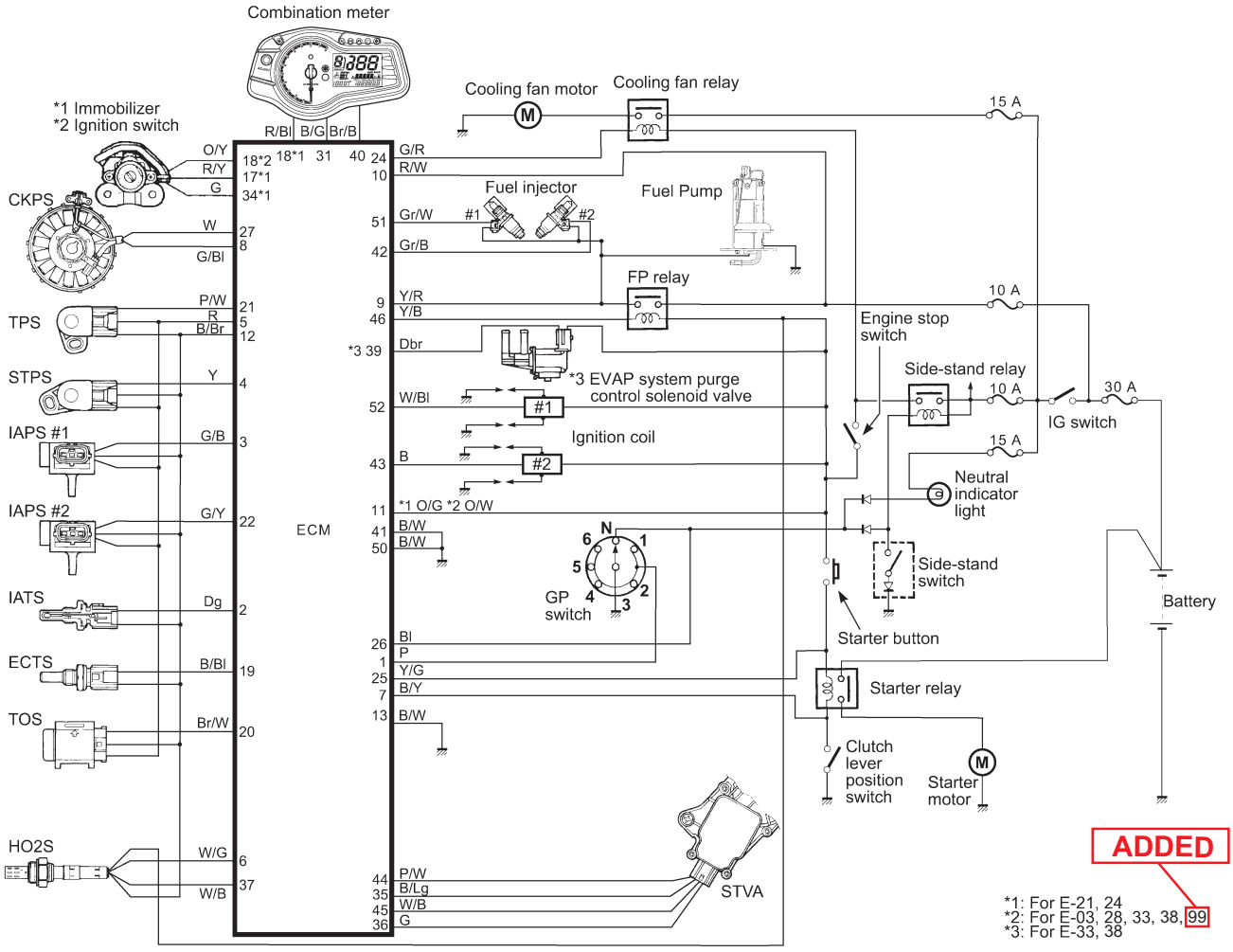
ADDED

Item		Specification	
		E03, 28, 33, 38, 99	E21, 24
Headlight	HI	60 x 2	←
	LO	55 x 2	←
Position/Parking light		5 x 2	←
Brake light/Taillight		21/5	←
Turn signal light		21 x 4	←
License plate light		5	←
Speedometer light		LCD	←
Tachometer light		LED	←
Turn signal indicator light		LED	←
High beam indicator light		LED	←
Neutral position indicator light		LED	←
Oil pressure/Engine coolant temp indicator light		LED	←
FI indicator light		LED	←
Freeze indicator light		LED	←
ABS indicator light		LED	←
Immobilizer indicator light		—	LED

Section 1A

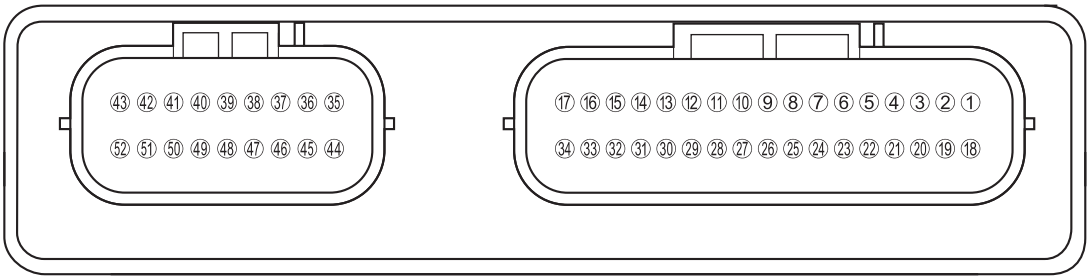
Schematic and Routing Diagram

FI System Wiring Diagram



Section 1A

Terminal Alignment of ECM Coupler



TERMINAL NO.	CIRCUIT	TERMINAL NO.	CIRCUIT
1	GP switch signal (GP)	27	CKP sensor signal (CKP+)
2	IAT sensor signal (IAT)	28	—
3	IAP sensor signal #1 (IAP.F)	29	—
4	STP sensor signal (STP)	30	—
5	Power source for sensors (VCC)	31	Serial data for speedometer (TECH)
6	HO2 sensor signal (HO2S)	32	Serial data for self-diagnosis
7	Clutch lever position switch (CLT)	33	—
8	CKP sensor signal (CKP–)	34	Immobilizer communication (for E-21, 24)
9	Power source for fuel injector (VM)	35	STVA signal (STVA. 1B)
10	Power source for back-up	36	STVA signal (STVA. 2B)
11	Power source	37	HO2 sensor heater (HO2SH)
12	Sensor ground (E2)	38	—
13	ECM ground (E1)	39	EVAP system purge control solenoid valve (for E-33, 38)
14	—	40	Tachometer
15	—	41	Ground
16	—	42	Fuel injector #2 (R)
17	Immobilizer communication (for E-21, 24)	43	Ignition coil #2 (R)
18	Immobilizer indicator (for E-21, 24) / Ignition switch signal (for E-03, 28, 33, 38, 99)	44	STVA signal (STVA. 1A)
19	ECT sensor signal (ECT)	45	STVA signal (STVA. 2A)
20	TO sensor signal (TOS)	46	Fuel pump relay (FP Relay)
21	TP sensor signal (TP)	47	—
22	IAP sensor signal #2 (IAP.R)	48	—
23	—	49	—
24	Cooling fan relay	50	Ground
25	Starter switch signal	51	Fuel injector #1 (F)
26	Neutral switch signal	52	Ignition coil #1 (F)

ADDED

Section 1A

DTC Table

Code	Malfunction Part	Remarks
C00	None	No defective part
C12 (P0335) ☞(Page 1A-27)	Crankshaft position sensor (CKPS)	Pick-up coil signal, signal generator
C13 (P1750) ☞(Page 1A-30)	Intake air pressure sensor #2 (IAPS)	For #2 cylinder
C14 (P0120-H/L) ☞(Page 1A-33)	Throttle position sensor (TPS)	*1
C15 (P0115-H/L) ☞(Page 1A-39)	Engine coolant temperature sensor (ECTS)	
C17 (P0105) ☞(Page 1A-30)	Intake air pressure sensor #1 (IAPS)	For #1 cylinder
C21 (P0110-H/L) ☞(Page 1A-43)	Intake air temperature sensor (IATS)	
C23 (P1651-H/L) ☞(Page 1A-47)	Tip-over sensor (TOS)	
C24 (P0351) ☞(Page 1A-52)	Ignition signal #1 (IG coil #1)	For #1 cylinder
C25 (P0352) ☞(Page 1A-52)	Ignition signal #2 (IG coil #2)	For #2 cylinder
C28 (P1655) ☞(Page 1A-52)	Secondary throttle valve actuator (STVA)	
C29 (P1654-H/L) ☞(Page 1A-56)	Secondary throttle position sensor (STPS)	
C31 (P0705) ☞(Page 1A-63)	Gear position signal (GP switch)	
C32 (P0201) ☞(Page 1A-66)	Injector signal #1	For #1 cylinder
C33 (P0202) ☞(Page 1A-66)	Injector signal #2	For #2 cylinder
C40 (P0505) ☞(Page 1A-68)	Idle speed control valve (ISC valve)	
C41 (P0230) ☞(Page 1A-70)	Fuel pump control system (FP control system)	Fuel pump, fuel pump relay
C42 (P1650) ☞(Page 1A-73)	Ignition switch signal (Anti-theft)	Ignition switch for E-03, 28, 33, 38, 99 /immobilizer for E-21, 24
C44 (P0130/P0135) ☞(Page 1A-73)	Heated oxygen sensor (HO2S)	ADDED
C60 (P0480) ☞(Page 1A-78)	Cooling fan control system	Cooling fan relay
C62 (P0443) ☞(Page 1A-82)	EVAP system purge control solenoid valve (E-33 only)	
C65 (P0506/P0507) ☞(Page 1A-85)	Idle speed control system	

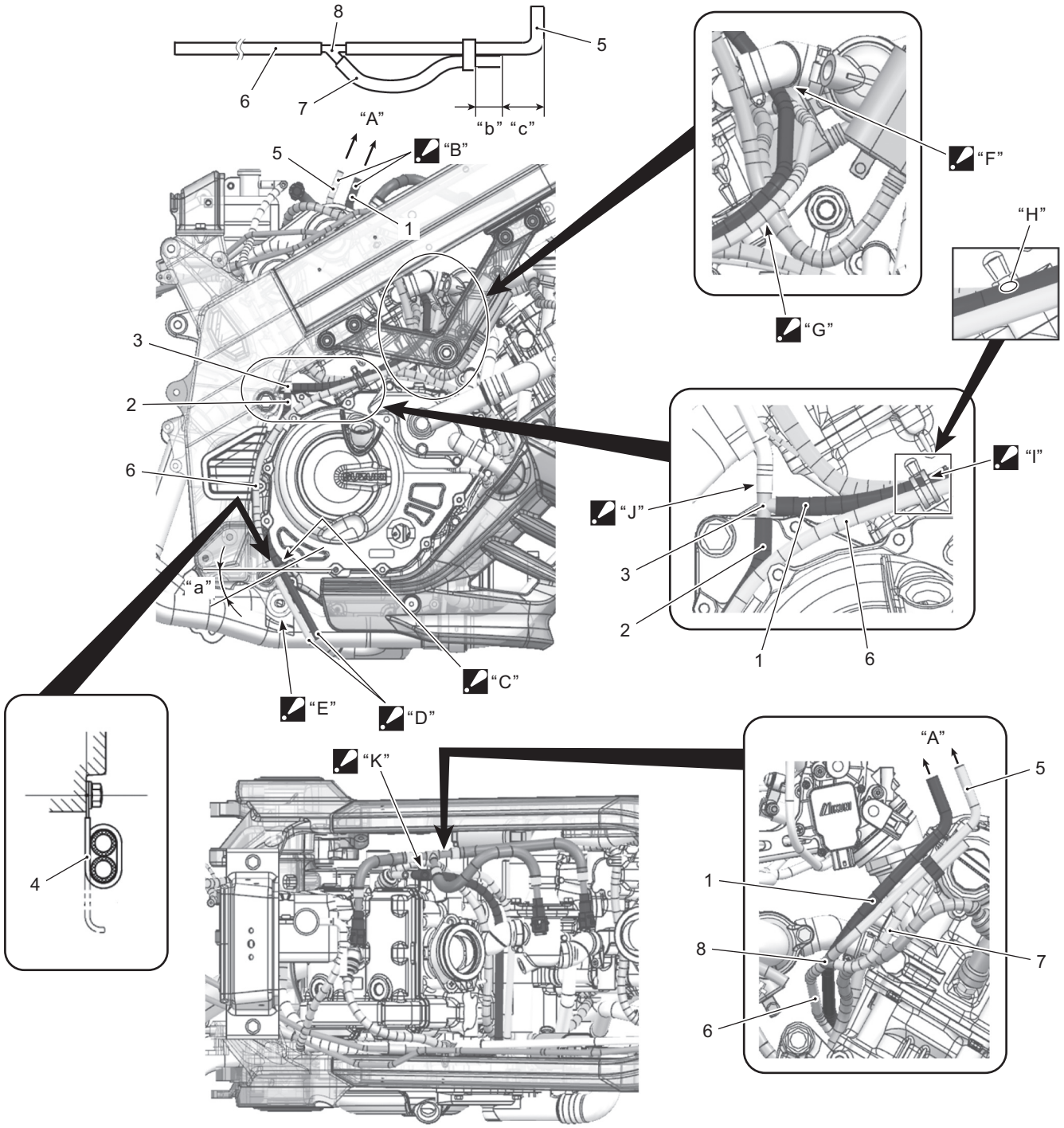
In the LCD (DISPLAY) panel, the malfunction code is indicated from small code to large code.
*1 To get the proper signal from the throttle position sensor, the sensor basic position is indicated in the LCD (DISPLAY) panel. The malfunction code is indicated in three digits. In front of the three digits, a line appears in any of the three positions, upper, middle or lower line. If the indication is upper or lower line when engine rpm is 1 300 r/min, slightly turn the throttle position sensor and bring the line to the middle.

Section 1G

ADDED

Schematic and Routing Diagram

Fuel Tank Drain Hose and Breather Hose Routing Diagram



1. Fuel tank water drain hose No. 1	"D": Align the tip of the hose. The tip of the hose must not come to contact with the under cowling.
2. Fuel tank water drain hose No. 2	"E": The hose must not come to contact with the exhaust pipe support tightening part.
3. Water drain joint	"F": Pass the drain hose under the thermostat inlet connector.
4. Clamp	"G": Pass the drain hose above the high-tension cord.
5. Fuel tank breather hose No. 1	"H": White marking
6. Fuel tank breather hose No. 2	"I": Clamp it within 10 mm more or less from the marked position. Clamp the hose together with the starter motor lead wire.
7. Fuel tank breather hose No. 3	"J": Connect the thinner side of water drain joint to the reservoir tank overflow hose.
8. Fuel tank breather joint	"K": Pass the drain hose inside the fuel feed hose.
"A": To the fuel tank	"a": 30 ± 10°
"B": Insert the tip of the hose to the bottom of tank nipple.	"b": 30 ± 10 mm (1.2 ± 0.4 in)
"C": Clamp it at the marked position of the hose.	"c": 40 ± 10 mm (1.6 ± 0.4 in)

Section 1H

No Spark or Poor Spark

Troubleshooting

NOTE

Check that the transmission is in neutral and the engine stop switch is in the "RUN" position. Grasp the clutch lever. Check that the fuse is not blown and the battery is fully-charged before diagnosing.

Step 1

Check the ignition system couplers for poor connections.

Is there connection in the ignition system couplers?

Yes Go to Step 2.

No Poor connection of couplers.

Step 2

Measure the battery voltage between input lead wires (E-21, 24: O/G and B/W, E-03, 28, 33, 38, 99: O/W and B/W) at the ECM with the ignition switch in the "ON" position.

ADDED

Is the voltage OK?

Yes Go to Step 3.

No
- Faulty ignition switch.
- Faulty turn signal / side-stand relay.
- Faulty engine stop switch.
- Broken wire harness or poor connection of related circuit couplers.

Step 3

Measure the ignition coil primary peak voltage. Refer to "Ignition Coil and Plug Cap Inspection" (Page 1H-7).

NOTE

This inspection method is applicable only with the multi-circuit tester and the peak volt adaptor.

Is the peak voltage OK?

Yes Go to Step 4.

No Go to Step 5.

Step 4

Inspect the spark plugs. Refer to "Spark Plug Inspection and Cleaning" in Section 0B (Page 0B-9).

Is the spark plug OK?

Yes Go to Step 5.

No Faulty spark plugs.

Step 5

Inspect the ignition coils. Refer to "Ignition Coil and Plug Cap Inspection" (Page 1H-7).

Is the ignition coil OK?

Yes Go to Step 6.

No Faulty ignition coil.

Step 6

Measure the CKP sensor peak voltage and its resistance. Refer to "CKP Sensor Inspection" (Page 1H-9).

NOTICE

The CKP sensor peak voltage inspection is applicable only with the multi-circuit tester and peak volt adaptor.

Are the peak voltage and resistance OK?

Yes
- Faulty ECM.
- Open or short circuit in wire harness.
- Poor connection of ignition wire harness.

No
- Faulty CKP sensor.
- Metal particles or foreign material being stuck on the CKP sensor and rotor tip.

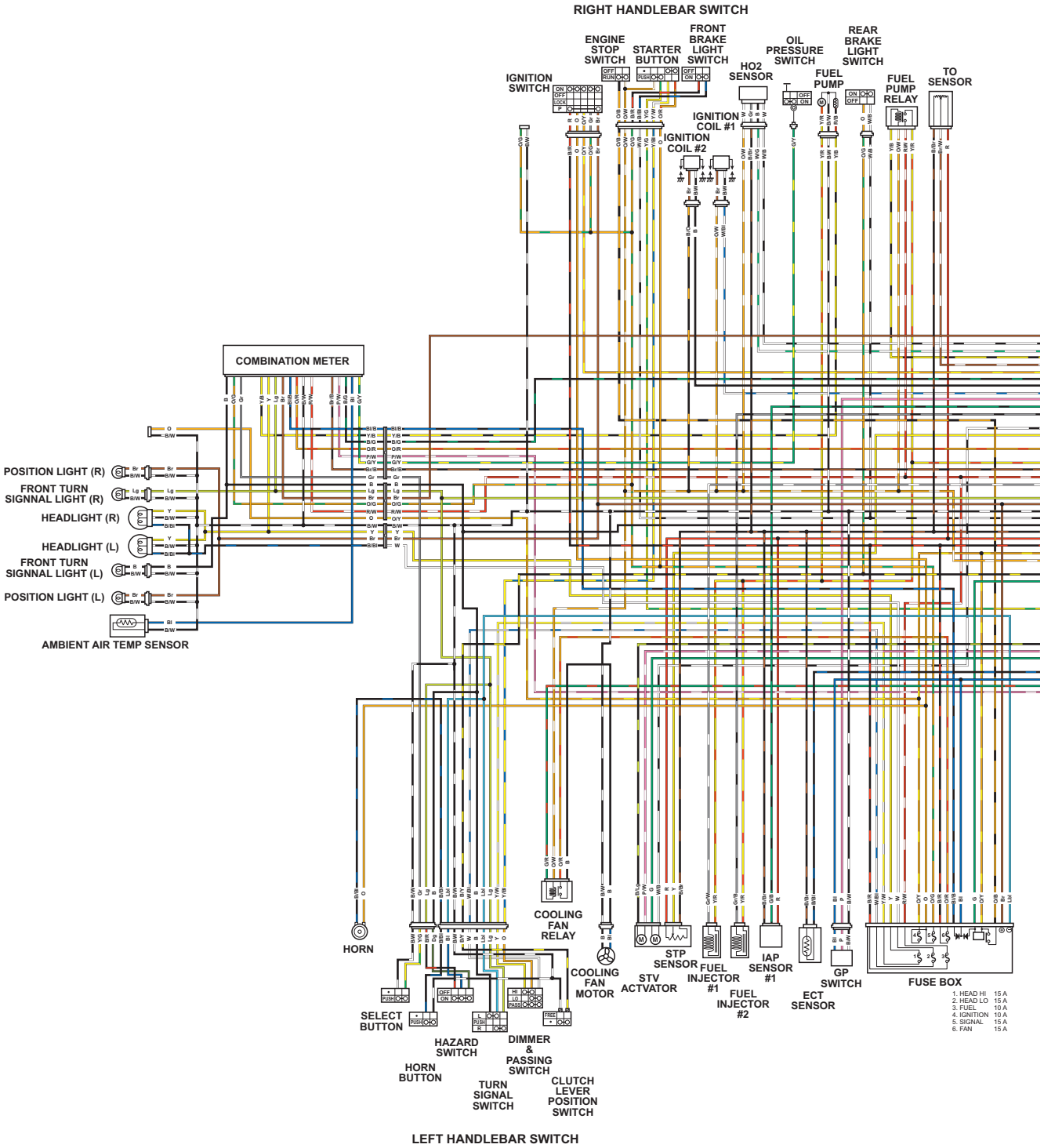
Section 9A
Wiring Systems

Schematic and Routing Diagram

Wiring Diagram

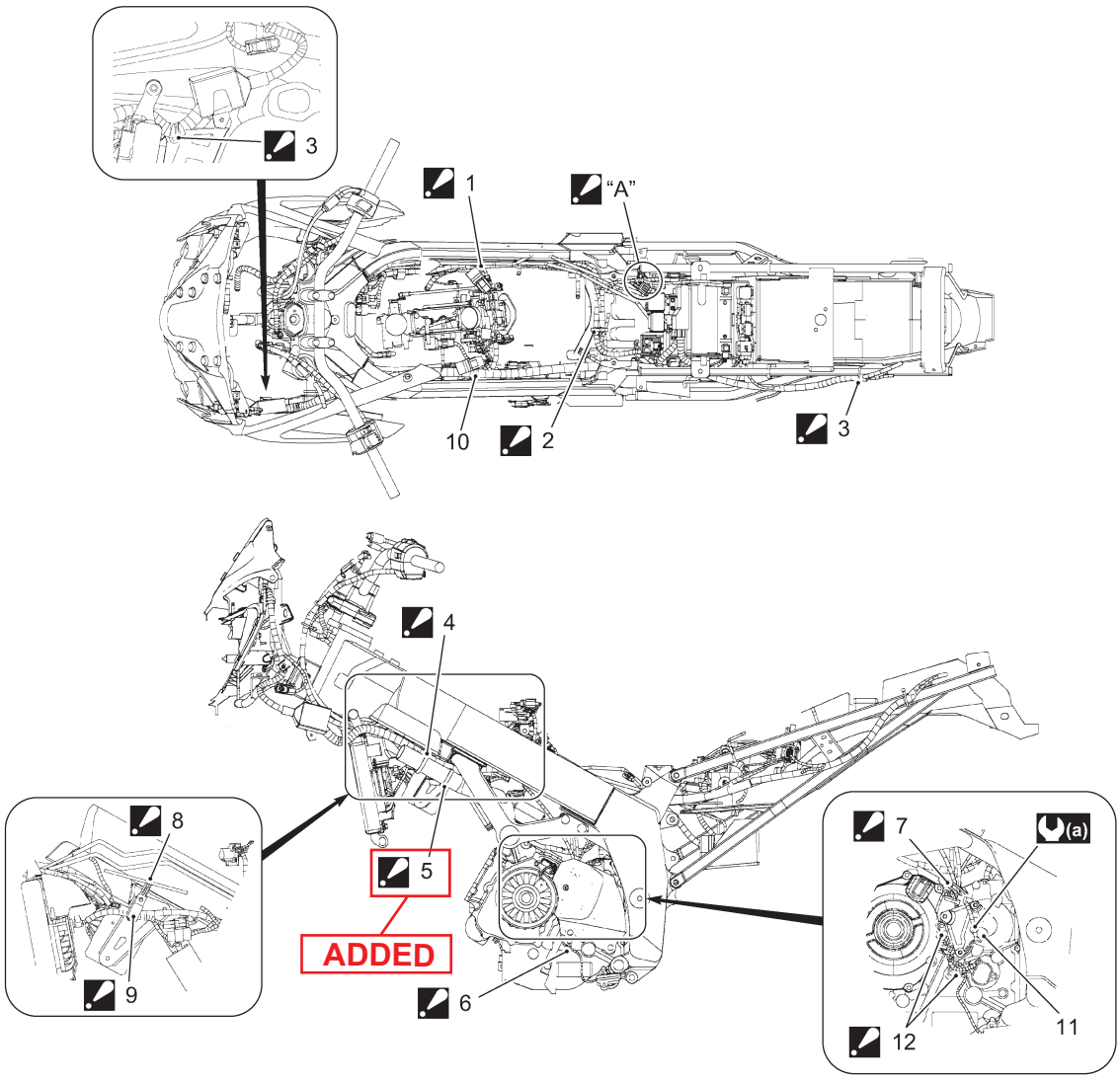
Refer to “Wire Color Symbols” in Section 0A (Page 0A-7).

For E-03, 28, 99 — **ADDED**



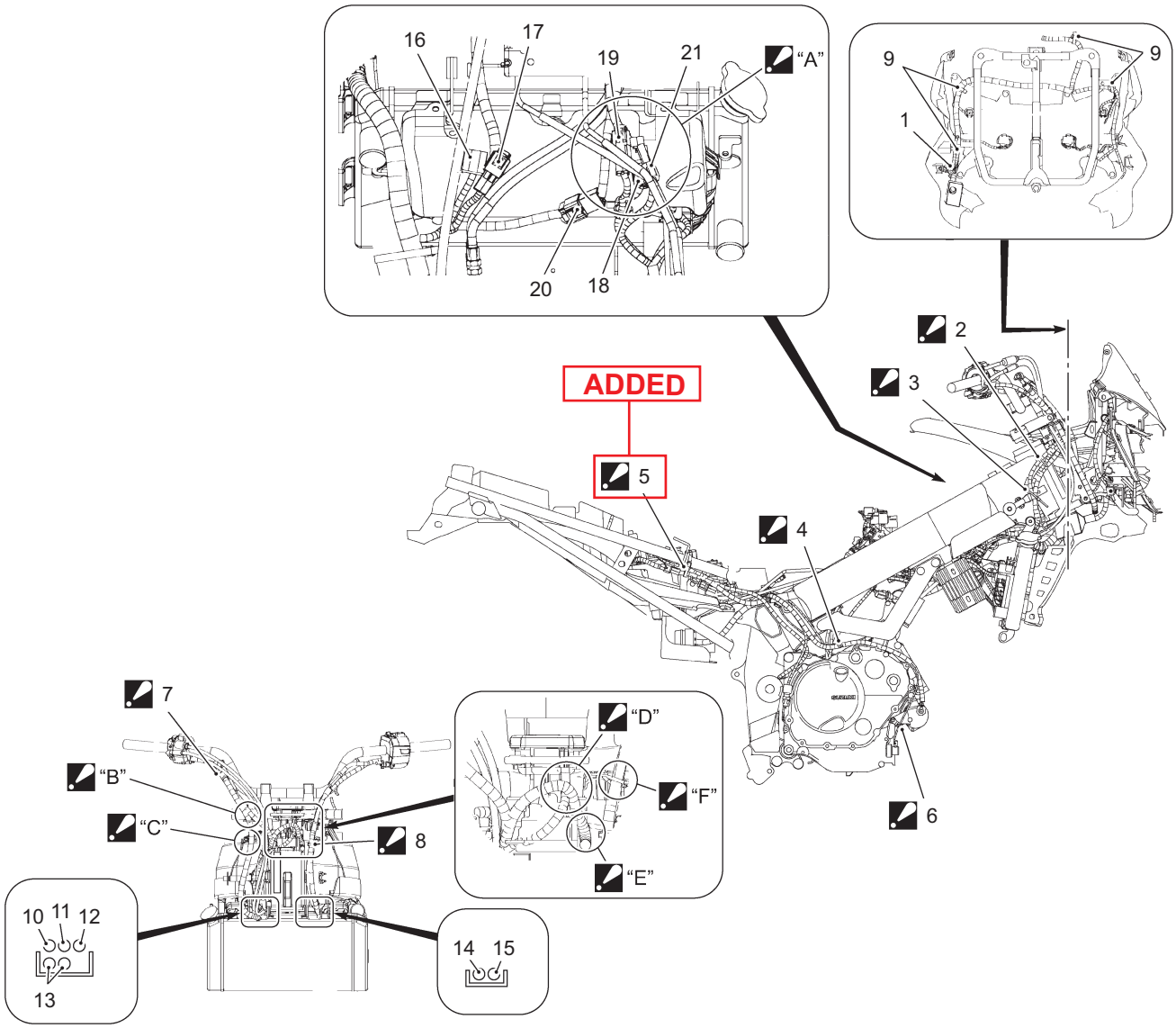
Section 9A

Wiring Harness Routing Diagram



1. Clamp : Clamp the ignition coil lead wire and generator lead wire.	8. Clamp : Clamp the reservoir tank inlet hose.
2. Clamp : Clamp the starter motor lead wire, wire harness, rear brake light switch lead wire and rear wheel speed sensor lead wire.	9. Clamp : Clamp the wire harness and regulator/rectifier lead wires.
3. Clamp : Clamp the wire harness. ADDED	10. Fixed clamp
4. Clamp : Clamp the wire harness and radiator inlet hose.	11. Speed sensor
5. Clamp : Clamp the radiator hose, clutch cable and ignition coil.	12. Clamp : Clamp the side-stand switch lead wires.
6. Clamp : Clamp the side-stand switch lead wire. Set the clamp between the crankcase and engine sprocket outer cover bolt.	"A": Set the HO2 sensor lead wire coupler and ABS lead wire inside the frame side cover and rear fender (rear).
7. Clamp : Clamp the gear position switch lead wire, generator lead wire, side-stand switch lead wire and speed sensor lead wire.	(a) : 4.5 N·m (0.45 kgf-m, 3.3 lbf-ft)

Section 9A



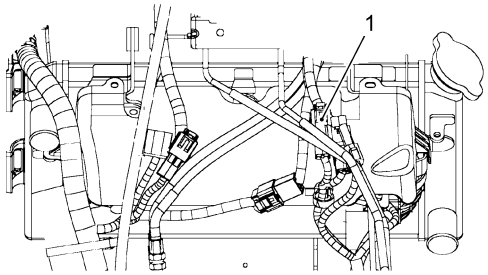
1. Ambient air temperature sensor	15. Clutch cable
2. Clamp : Clamp the right handlebar switch lead wire, immobilizer lead wire (E-21, 24) at the gray tape point and ignition switch lead wire.	16. 10 terminals coupler of left handlebar lead wire
3. Clamp : Clamp the right handlebar switch lead wire, immobilizer lead wire (E-21, 24) and ignition switch lead wire.	17. 4 terminals coupler of left handlebar lead wire
4. Clamp : Clamp the stator motor lead wire and oil pressure switch lead wire.	18. Immobilizer lead wire coupler (E-21, 24)
5. Clamp : Clamp the wiring harness and battery minus wire.	19. Ignition switch lead wire coupler
6. Clamp : Clamp the oil pressure switch lead wire. ADDED	20. Right handlebar switch lead wire coupler
7. Clamp : Clamp the right handlebar switch lead wire and grommet sleeve on the front brake hose No.1.	21. Front wheel speed sensor wire coupler
8. Clamp : Clamp the left handlebar switch lead wire and grommet sleeve on the clutch cable.	"A": Pass the immobilizer lead wire, ignition switch lead wire, right handlebar switch lead wire under the front brake pipes.
9. Fixed clamp	"B": Pass the right handlebar switch lead wire through the guide.
10. Right handlebar switch lead wire	"C": Pass the right handlebar switch lead wire in front of throttle cables. Pass the right handlebar switch lead wire inside throttle cables.
11. Ignition switch lead wire	"D": Pass the ignition switch lead wire in front of immobilizer lead wire (E-21, 24).
12. Immobilizer lead wire (E-21, 24)	"E": Do not twist the ignition switch lead wire.
13. Throttle cable	"F": Pass the left handlebar switch lead wire through the guide.
14. Left handlebar switch lead wire	

Section 9C

Ignition Switch Inspection

Inspect the ignition switch in the following procedures:

1) Remove the air cleaner box. Refer to “Air Cleaner Box Removal and Installation” in Section 1D (Page 1D-6).
2) Disconnect the ignition switch lead wire coupler (1).



3) Inspect the ignition switch for continuity with a tester. If any abnormality is found, replace the ignition switch with a new one.

Special tool
TOOL : 09900–25008 (Multi circuit tester set)

Tester knob indication
Continuity (•))))

E-21, 24

Color / Position	R	O	Gr	Br
ON	○	○	○	○
OFF				
LOCK				
P	○			○

E-03, 28, 33, 38, 99 — ADDED

Color / Position	R	O	O/Y	Gr	Br
ON	○	○	○	○	○
OFF					
LOCK					
P	○				○

4) After finishing the ignition switch inspection, reinstall the removed parts.

Section 9D

Fuel Tank Side Cover and Fuel Tank Front Cover Installation

Install the fuel tank side cover and fuel tank front cover in the reverse order of removal. Pay attention to the following point:

- Tighten the fuel tank side cover bolt (1) to the specified torque.

Tightening torque
Fuel tank side cover bolt (a): 5.5 N·m (0.55 kgf-m, 4.0 lbf-ft)

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